The Race Between Technology and Human Capital

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Resumo/Abstract:
This paper develops a model in which heterogeneous firms invest in R&D to improve technology, and heterogeneous workers invest in human capital to increase their earnings. Technology and human capital are complements in production, so continued investment in technology is profitable only because human capital is growing, and continued investment in human capital is worthwhile only because technology is growing. Both investment technologies have stochastic components, and the balanced growth path has stationary, non-degenerate distributions of technology and human capital. Wage differentials across workers arise partly from differences in the technologies they work with, and profit differentials across firms arise partly from differences in the skill of the workers they employ.